Appl. No. 09/936,426 Amendment dated May 3, 2006 Reply to Office Action of February 3, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-13. Canceled

14. (Currently Amended) An apparatus for the decomposing fluorine compounds which contain at least one of PFC, HFC, SF₆ and NF₃, said apparatus comprising a reactor having therein a fluorine compound decomposition catalyst for decomposing said fluorine compounds -at least one of PFC, HFC, SF₆ or NF₃ charged upstream therein into said reactor in an upstream portion thereof and a harmful compound removing catalyst having a reaction temperature of 650-850°C for the decomposition of at least one of SO₂F₂ and N₂O-N₂O₃ formed by said decomposition decomposition, charged into said reactor at a portion downstream-of said reactor therein of where said decomposition catalyst is charged into said reactor; a heater for heating said catalysts in said reactor; a moisture supplying unit for adding moisture to said fluorine compound supplied to said reactor; an inert gas supplying unit for adding an inert gas as a dilutent gas; and an oxygen supplying unit for adding oxygen or an oxygen-containing gas to a gas containing at least one of HF, CO, SO₂F₂ and N₂O formed by decomposition of said fluorine compounds.

15. (Canceled)

- 16. (Currently Amended) An apparatus for the decomposing fluorine compounds as claimed in claim 14, wherein said harmful compound removing catalyst for the decomposition of at least one of CO, SO₂F₂ and N₂O-N₂O, contains at least one component selected from Pd, Pt, Cu, Mn, Fe, Co, Rh, Ir and Au-Au, in the form of a metal or an oxide.
- 17. (Previously Presented) An apparatus for the decomposing fluorine compounds as claimed in claim 14, wherein said harmful compound removing catalyst for the decomposition of at least one of SO₂F₂ and N₂O is selected from a catalyst of Pd and La carried on alumina, a catalyst of Pt and La carried on alumina, a catalyst of Rh and La carried on alumina, a catalyst of Au and La carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pd carried on alumina, a catalyst of Pt carried on alumina, a catalyst of Cu carried on alumina, a catalyst of Mn carried on alumina, a catalyst of Pd and W carried on titania and a catalyst of Co carried on alumina.
- 18. (Previously Presented) An apparatus for the decomposing fluorine compounds as claimed in claim 14, further comprising a gas scrubbing tower for removing hydrogen fluoride and other water soluble components from a gas

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discharged from said reactor by contacting said gas with water or an alkaline aqueous solution.

- 19. (Previously Presented) An apparatus according to claim 14, wherein said catalyst for decomposing fluorine compounds includes a combination of aluminum and nickel in the form of an oxide.
 - 20. (Canceled)